The author attempts to cover a very broad field and succeeds in showing the complexity of food science. The section on food preparation and processing, for instance, discusses Western technologies and contrasts them with traditional and intermediate technologies. It will be a very valuable book for first-year students in food science and related courses in tropical countries, and thus serve the author's first target group well.

In the case of the second group of readers for which this book is intended, the text is probably too basic. The chapter on food commodities, from which those readers would have benefited most, is very short. Tropical oilseeds, for instance, are discussed in only three pages of text. No references are given in the text, but suggestions for further reading are listed at the end of the book, which again limits the book's value for this group of readers.

I have found very few mistakes. One which should be mentioned is the process description for the extraction of oil from copra (p. 137, screw expelling followed by hydraulic pressing), which is certainly not the technology commonly applied.

It is probably inevitable that this broad approach fails to differentiate problems. For example, kwashiorkor may be a problem in certain parts of Africa, but in most of the developing world malnutrition shows itself primarily in the form of energy deficiency. This book is strongly recommended for food science and technology students in tropical countries. It also provides good reading for those who teach students from developing countries.

## **Martin Dietz**

Studies in Natural Products Chemistry, Vol. 2: Structure Elucidation (Part A). Edited by Atta-ur-Rahman. Elsevier Science Publishers, Amsterdam, 1988. ISBN 0-444-43038-5. x + 470 pp. Price: US\$ 155.25/Dfl. 295.00.

Natural products chemistry was founded on the techniques of isolation, purification and structure elucidation; but in recent years attention has been focused more on synthesis and biosynthesis, especially the former. Innumerable books and reviews have been published during the last 20 years, and synthetic approaches to almost every class of natural products have been described. During the same period major advances have also occurred in the methodologies of chromatography and spectroscopy, particularly in the fields of mass spectrometry and nmr spectrometry. However, these revolutionary developments have received much less exposure in textbooks of natural products chemistry. This book seeks to make good this deficiency, and we are promised a series of books on structure elucidation. Atta-ur-Rahman has assembled 17 specialist reviews which describe the applications of a whole range of new techniques for structure elucidation. The first few chapters cover some of the techniques like chemical ionisation mass spectrometry using nitric oxide as the reagent gas; FAB and field desorption mass spectrometry; and some of the potential uses of 2D nmr methods. These accounts are rather superficial, and thus of rather specialised interest, but the remaining chapters concentrate on particular examples of structure elucidation. The highlights include a comprehensive account of glucoamylases, and a timely and practical description of the use of plant tissue cultures for the production of natural products. In addition, there are two chapters that deal primarily with biologically active natural products, namely those from the *Hepaticae* and those useful for the treatment of systemic opportunistic infections.

The book is thus rather a hotch-potch, and as so often happens with books produced using camera-ready copy the print quality of the various chapters is variable. Overall I doubt whether there is enough of general interest to attract a large readership, and the high price will also be a deterrent. The companion text, 'Studies in Natural Products Chemistry, Vol. 1: Stereospecific Synthesis (Part A)' (also assembled by Atta-ur-Rahman), is a much better book, and includes some impressive personal accounts of synthetic achievements.

John Mann